# Pricing

AWS offers you a pay-as-you-go approach for pricing for over 160 cloud services. With AWS you pay only for the individual services you need, for as long as you use them, and without requiring long-term contracts or complex licensing. AWS pricing is similar to how you pay for utilities like water and electricity. You only pay for the services you consume, and once you stop using them, there are no additional costs or termination fees.

## How do you pay for AWS?

- **Pay - as - you - go**

Pay-as-you-go allows you to easily adapt to changing business needs without overcommitting budgets and improving your responsiveness to changes. With a pay-as-you-go model, you can adapt your business depending on need and not on forecasts, reducing the risk of over-positioning or missing capacity.

- **Save When You Reserve**

For certain services like Amazon EC2 and Amazon RDS, you can invest in reserved capacity. With Reserved Instances, you can save up to 75% over equivalent on-demand capacity. When you buy Reserved Instances, the larger the upfront payment, the greater the discount.

- **Pay less by using more**

With AWS, you can get volume based discounts and realise important savings as your usage increases. For services such as S3, pricing is tiered, meaning the more you use, the less you pay per GB. AWS also gives you options to acquire services that help you address your business needs.

## Calculate your savings

- **AWS Pricing Calculator**

Whether you are running a single instance or dozens of individual services, you can estimate your monthly bill using the AWS Pricing Calculator. The calculator allows you to estimate individual or multiple prices and use templates to appraise complete solutions.

- **TCO Calculator**

The AWS TCO calculator gives you the option to evaluate the savings from using AWS and comparing against on premises and co-location environments. The TCO calculator matches your current infrastructure to the most cost effective AWS offering. This tool takes into consideration all the costs to run a solution, including physical facilities, power and cooling, providing a realistic end-to-end comparison of your costs.

# Free Tier

## Types of offers

Three different types of free offers are available depending on the product used. See below for details on each product.

- **Always Free**

These free tier offers do not expire and are available to all AWS customers

- **12 months free**

Enjoy these offers for 12-months following your initial sign-up date to AWS

- **Trials**

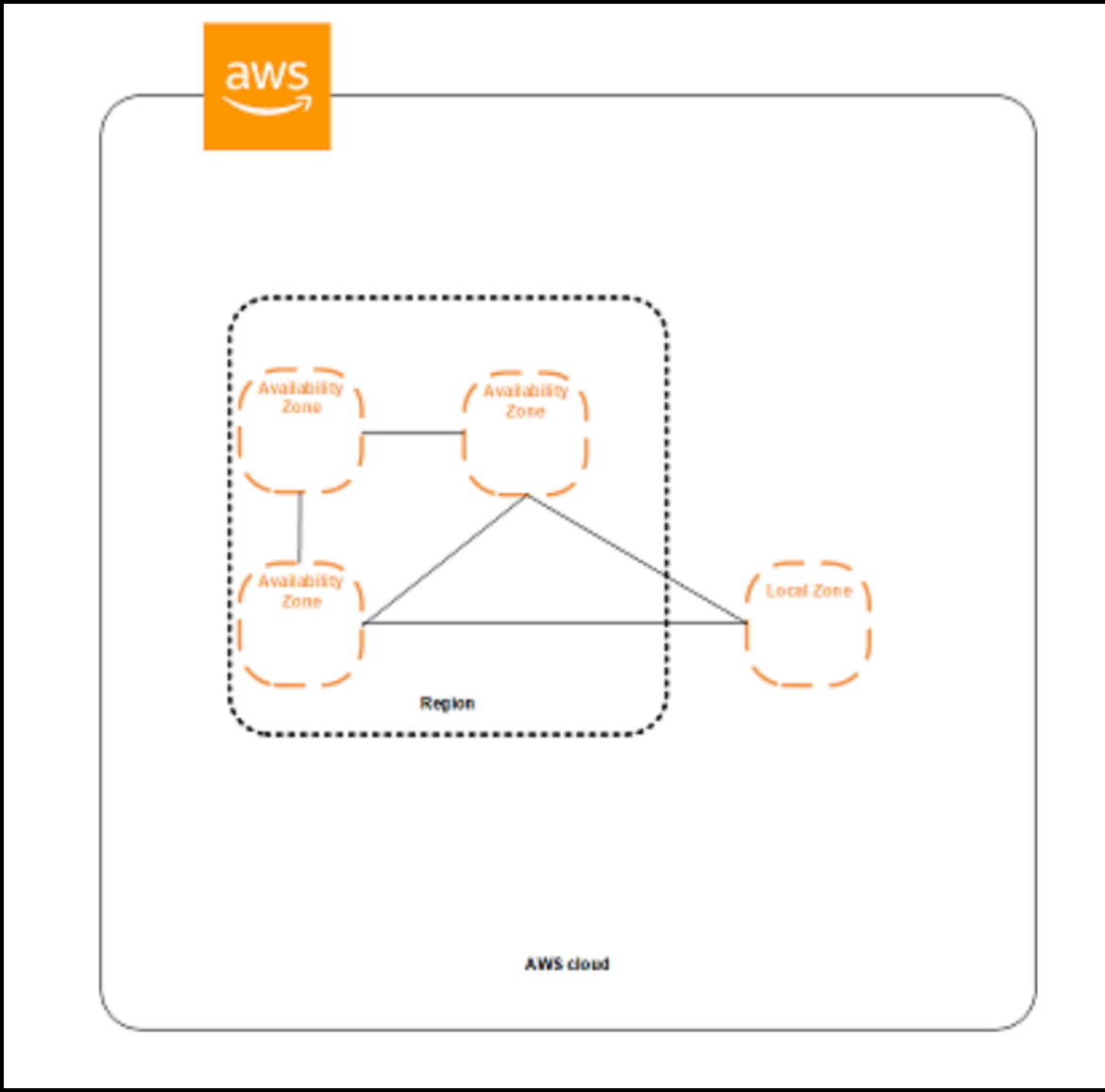
Short-term free trial offers start from the date you activate a particular service

- **EC2 :** 750 Hours per month FREE for 12 Months
- **S3 :** 5GB of standard storage FREE for 12 Months
- **RDS :** 750 Hours per month of t2.micro FREE for 12 Months
- **DynamoDB :** 25 GB of standard storage always FREE

# Regions and Availability Zones

## Regions

Each Region is completely independent. Each Availability Zone is isolated, but the Availability Zones in a Region are connected through low-latency links. A Local Zone is an AWS infrastructure deployment that places select services closer to your end users. A Local Zone is an extension of a Region that is in a different location from your Region. It provides a high-bandwidth backbone to the AWS infrastructure and is ideal for latency-sensitive applications, for example machine learning. The following diagram illustrates the relationship between Regions, Availability Zones, and Local Zones.



When you view your resources, you see only the resources that are tied to the Region that you specified. This is because Regions are isolated from each other, and AWS doesn't automatically replicate resources across Regions.

### Availability Zone

When you launch an instance, you can select an Availability Zone or let AWS choose one for you. If you distribute your instances across multiple Availability Zones and one instance fails, you can design your application so that an instance in another Availability Zone can handle requests.

You can also use Elastic IP addresses to mask the failure of an instance in one Availability Zone by rapidly remapping the address to an instance in another Availability Zone.

An Availability Zone is represented by a Region code followed by a letter identifier; for example, **us-east-1a**. To ensure that resources are distributed across the Availability Zones for a Region, AWS independently maps Availability Zones to names for each AWS account.

**For example,** the Availability Zone us-east-1a for your AWS account might not be the same location as us-east-1a for another AWS account.

### Local Zones

A Local Zone is an extension of an AWS Region in geographic proximity to your users. When you launch an instance, you can select a subnet in a Local Zone. Local Zones have their own connections to the internet and support AWS Direct Connect, so resources created in a Local Zone can serve local users with very low-latency communications.

A Local Zone is represented by a Region code followed by an identifier that indicates the location, for example, **us-west-2-lax-1a.**

### Network Border Groups

A network border group is a unique set of Availability Zones or Local Zones from where AWS advertises IP addresses. You can allocate the following resources from a network border group:

- Elastic IPv4 addresses that Amazon provides
- IPv6 Amazon-provided VPC addresses

A network border group limits the addresses to the group. IP addresses cannot move between network border groups.